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(FILE 'HOME' ENTERED AT 11:12:08 ON 11 JAN 2006)
FILE 'CA' ENTERED AT 11:12:15 ON 11 JAN 2006
L1 1904 S (SOLUB? OR DISSOL? OR DECOMP? OR EXTRACT? OR ETCH? OR LEACH?) (8A)
(BERYL? OR BEO##)
L2 188 S L1 AND (BIFLUORIDE OR DIFLUORIDE OR NH4 OR AMMONIUM OR NH4F2)
L3 10570 S (BERYL? OR BEO##) (10A) (DETECT? OR DETERMIN? OR ASSAY? OR ANALY?
OR ASSESS? OR ACERTAIN? OR TEST? OR MEASUR? OR MONITOR? OR ESTIMAT?
OR EVALUAT? OR EXAMIN? OR SENSE# OR SENSOR OR SENSING OR IDENTIF?
OR PROBE# OR PROBING OR QUANTITAT? OR QUANTIF? OR CHECK?)
L4 600 S AMINE(5A)BUFFER?
L5 1110 S (AMINO ACID OR AMINOACID OR LYSINE) (5A)BUFFER?
L6 0 S L3 AND L4-5
L7 492 S (AMINO ACID OR AMINOACID OR LYSINE) (2A)BUFFER?
L8 0 S L2 AND L4-5
L9 0 S (BERY? OR BEO##) AND L4-5
L10 85 S L7 AND (ALKAL? OR BASIC)
L11 47 S L2 AND PH
L12 953 S L3 AND PH
L13 434 S L1 AND L3
L14 107 S L12 AND L13
L15 131 S L5 AND (METAL? OR CHELAT? OR COMPLEX?)
L16 338 S L10-11,L14-15
L17 240 S L16 NOT (STONE WASHED OR ACETYLACET? OR GAMMA OR DRAINAGE OR TEAR
OR CHROMATOG? OR ADHES?)
L18 17 S L16 NOT L17 NOT (GRAPHITE OR TRACE FLUORINE OR URINE) AND
((COMPLETE OR SPECTROPHOTO? OR SUCCESSIVE OR SILICATE OR OXIDE OR
MICROGRAM OR SPECTROCHEM?)/TI OR TISSUE)
L19 188 S L17 NOT (ESI OR SAKE OR BORON OR ONIUM OR GASTRIC OR MILK OR
SINTER? OR ELECTROPHOR? OR ENZYM? OR DIMEDROL OR SULFIDE)
L20 153 S L19 NOT (PENICIL? OR REDWOOD OR GENE OR KETONE OR INFRARED OR DEAE
OR OXINE OR INK OR ION EXCHANGE OR IMMUNO? OR GRAPHIC OR LIPID)
L21 4 S L19 NOT L20 AND (SAGA OR ZEPH? OR HYDROXYFL? OR QUINAL?)
L22 126 S L20 NOT (ACID ANALYSIS OR FABRIC OR AZOMETH? OR SKIN OR CONTACT
LENS OR SULFUR DIOXIDE OR MODERATORS OR INTESTIN? OR ASH OR REFOLD?
OR HAIR OR REMEDIA? OR HORMONE OR PASSIVA? OR PHTHALAL?)
L23 88 S L22 NOT (INTRACEL? OR ELECTROLY? OR FATTY OR FRUCTOS? OR CORROS?
OR ELECTROCHEM? OR BERYLLON OR VIARAL OR BEER OR APROTIN? OR
PEPTIDE OR NMR OR UROKIN? OR AUREOM? OR SINCAL? OR SULFUR DETN)
L24 10 S L22 NOT L23 AND (KHIMDU? OR ZEPH OR XYLEN? OR CHROME OR BENZOHY?
OR ADOGEN OR PPTG OR BACK/TI OR AL MG BE OR TERNARY)
L25 119 S L18,L21,L23-24

=> d bib,ab 125 1-119

L25 ANSWER 42 OF 119 CA COPYRIGHT 2006 ACS on STN
AN 99:186527 CA
TI Solvent **extraction** of **beryllium** from malonate solutions with liquid
anion exchangers
AU Rao, R. Raghunadha; Khopkar, S. M.
CS Dep. Chem., Indian Inst. Technol., Bombay, 400 076, India
SO Analytical Chemistry (1983), 55(14), 2320-3
AB **Beryllium** was **quant. extd.** at pH 5.5-7.0 in microgram amts. with 0.06M

Aliquat 336S in xylene from $5 \times 10^{-3}M$ malonic acid soln., stripped with 0.5M HCl and detd. spectrophotometrically at 523 nm as its complex with thorin. Those metals which could not form anionic complexes with malonic acid and were not extd. with Be at pH 6.5 were sepd. from it. Metals forming weak malonato complexes were scrubbed from the org. phase with H₂O. Elements like Bi, Sb, Fe, U, Ga, and V which form strong malonato complexes were sepd. by selective stripping with HCl, H₂SO₄, or HNO₃. The method was extended to det. Be in beryl and Be alloys.

L25 ANSWER 70 OF 119 CA COPYRIGHT 2006 ACS on STN

AN 76:41709 CA

TI Cyclopentanone-2-carboxanilide as a reagent for the gravimetric, titrimetric, and spectrophotometric **determination of beryllium**

AU Chaudhuri, N. K.; Das, J.

CS Dep. Chem., Univ. Burdwan, Burdwan, India

SO Analytica Chimica Acta (1971), 57(1), 193-9

AB **Beryllium**, <4 mg, can be **detd.** gravimetrically with cyclopentanone-2-carboxanilide (I) in the pH range 5.9-8.1; the relative std. deviation is $\pm 0.26\%$. Alternatively, the complex can be dissolved in EtOH-HCl and detd. by titrn. with bromate. **Beryllium**, 2.0-6.5 μg , can be **extd.** as its complex with I into iso-BuCOMe in the pH range 7.0-10.5; when the absorbance of the ext. is measured at 332 nm against pure solvent as ref., the std. deviation is $\pm 1.08\%$. When the di-Na or Mg salt of EDTA is added as masking agent, Be can be detd. in the presence of Ag(I), Tl(I), Cd(II), Cu(II), Co(II), Pb(II), Hg(II), Ni(II), Zn(II), Bi(III), Al(III), Ga(III), In(III), Cr(III), Fe(III), Ce(III), Th(IV), Zr(IV), Ti(IV), V(IV), Mo(IV), U(VI), or W(VI) either gravimetrically or spectrophotometrically and in most cases by both procedures. **Beryllium** in **beryl** can be **detd.** by any of the proposed methods.

L25 ANSWER 72 OF 119 CA COPYRIGHT 2006 ACS on STN

AN 73:89629 CA

TI Purification of **beryllium** by liquid **extraction**

PA United States Atomic Energy Commision

SO Brit., 7 pp.

PI GB 1188759 19700422 GB

US 3518063 19700000 US

PRAI US 19671003

AB Dissolved Be can be sepd. from aq. alkali metal or (NH₄)₂CO₃ soln. by adjusting the total CO₃²⁻ concn. to 0.2-1.0M, followed by solvent extn., into the org. phase consisting of a H₂O-immiscible diluent and 0.3-0.5N quaternary **ammonium** carbonate contg. 39-75 C atoms, e.g. (R₁R₂R₃NMe)₂CO₃, where R₁ is alkyl or aryl (including aralkyl) and R₂ and R₃ are alkyl. When R₁ is alkyl, R₂ and R₃ each contain ≥ 6 C atoms. When R₁ is aryl, R₂ is Me and R₃ contains ≥ 17 C atoms. Diluents are aliphatic or aromatic hydrocarbons or chlorinated hydrocarbons. Optimum pH is 10. The org. extract may be purified by scrubbing with CO₃²⁻ or HCO₃⁻ soln. having total CO₃²⁻ of 0.1-0.5M. Be may be returned to the aq. phase by stripping with HCO₃⁻. The method gives better sepn. from Fe, Al, Ca, Mg than acid extn. methods.

=> log y

STN INTERNATIONAL LOGOFF AT 13:30:32 ON 11 JAN 2006